

ABSTRACT

A process for producing a self-disrupting filter cake in an underground formation, which process comprises: (a) incorporating into a drilling fluid a solid polymer capable of being converted by hydrolysis into one or more organic acids; (b) using the drilling fluid to drill a wellbore into the underground formation such that the solid polymer in the drilling fluid contributes to the formation of a filter cake; and (c) allowing the solid polymer to hydrolyse in the presence of water and to disrupt the integrity of the filter cake. A drilling fluid which contains as a bridging agent one or more solid polymers capable of being converted by hydrolysis into one or more organic acids is also provided.